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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,223	11/02/2001	Lee Kamensky	2657.2009-001	6935
21005 7590 01/02/2008 HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			EXAMINER LIN, JASON K	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 01/02/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/004,223	Applicant(s) KAMENSKY ET AL.	
	Examiner Jason K. Lin	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is responsive to application No. 10/004,223 filed on 07/16/2007.

Claims 1-16 are pending and have been examined.

Response to Arguments

2. Applicant's arguments with respect to **claims 1-16** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1, 6, and 11-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadansky et al. (US 6,507,562), in view of Dillon (US 2003/0206554), and further in view of Kamisaka et al. (US 5,708,960).

Consider **claim 1**, Kadansky teaches, a method for content push synchronization for bulk data transfer in a multimedia network (Col 27: line 65 – Col 28: line 18), comprising:

scheduling transmission of bulk data content (Col 16: lines 28-29 and Col 29: lines 33-35 teaches the reliable multicast protocol model (TRAM) schedules packet transmission;

notifying a plurality of end node devices of the schedule bulk data transmission (Col 6: lines 30-37 teaches transmitting an alert beacon message to multiple destination stations {end node devices}),

determining if the bulk data content was received as expected (Col 4: lines 47-49 and Col 5: lines 54-56); and

sending a failure indication (NACK – Col 4: lines 52-56 and Col 38: lines 38-47);

Kadansky does not explicitly teach such notification including sending information over the network indicating an expected end time for the scheduled transmission, the notification occurring before the bulk data transmission begins

transmitting the bulk data content via broadcast;

attempting to selectively receive a subset of the content during the scheduled transmission;

at the expected end time for the scheduled transmission, determining if the bulk data content was received as expected; and

if not received as expected, sending a failure indication.

In an analogous art Dillon teaches, transmitting the bulk data content via broadcast (Paragraph 0040: lines 1-4 and Paragraph 0154: lines 10-16);

attempting to selectively receive a subset of the content during the scheduled transmission (Paragraph 0031: lines 1-5 and Paragraph 0031: lines 1-6);

Therefore, it would have been obvious to a person of ordinary skill in the art to modify Kadansky's system to include transmitting the bulk data content via broadcast; attempting to selectively receive a subset of the content during the scheduled transmission, as taught by Dillon, for the advantage of transmitting data to everyone in a multicast group and allowing the end point devices to receive preferred data.

Dillon further teaches that an end user is notified through the EPG (Electronic Program Guide) when reception of packages will take place (Dillon - Paragraph 0154: lines 1-16). However, both Kadansky and Dillon do not explicitly teach such notification including sending information over the network indicating an expected end time for the scheduled transmission, the notification occurring before the bulk data transmission begins

at the expected end time for the scheduled transmission, determining if the bulk data content was received as expected; and

if not received as expected, sending a failure indication.

In an analogous art Kamisaka teaches, such notification including sending information over the network indicating an expected end time for the scheduled

transmission, the notification occurring before the bulk data transmission begins
(Col 13: line 47 - Col 14: line 2),

at the expected end time for the scheduled transmission, determining if
the bulk data content was received as expected (Col 13: line 47 - Col 14: line
2),and

if not received as expected, sending a failure indication (Col 13: line 47 -
Col 14: line 2).

Therefore, it would have been obvious to a person of ordinary skill in the
art to modify the system of Kadansky and Dillon to include at the expected end
time for the scheduled transmission, determining if the bulk data content was
received as expected; and if not received as expected, sending a failure
indication, as taught by Kamisaka, for the advantage of notifying the receiver
when to expect termination of data transmission so that communication channels
will not need to remain open for longer than necessary, allowing for the reception
device to cease reception activities saving power consumption, and allowing for
the receiver to cope with conditions where it may fail to properly receive data, etc
(Kamisaka - Col 13: lines 29-35).

Consider **claim 6**, Kadansky, Dillon, and Kamisaka teaches wherein the
step of notifying the plurality of end node devices comprises:

delivering transmission schedules (beacon message) to the plurality of end node devices prior to the scheduled transmissions of bulk content (Kadansky – Col 6: lines 30-37).

Consider **claim 11**, Kadansky, Dillon, and Kamisaka teaches wherein the content is a plurality of promotions (Kadansky – Col 11: lines 33-34).

Consider **claim 12**, Kadansky, Dillon, and Kamisaka teaches wherein the scheduled transmissions are scheduled multicast transmissions (Kadansky – Col 6: lines 19-40 and Col 37: lines 10-21).

Consider **claim 13**, Kadansky, Dillon, and Kamisaka teaches wherein the scheduled transmissions are scheduled broadcast transmissions (Dillon - Paragraph 0040: lines 1-4 and Paragraph 0154: lines 10-16).

Consider **claim 14**, Kadansky, Dillon, and Kamisaka teaches wherein the content is transmitted multiple times during the scheduled transmissions to ensure that the plurality of end node devices receive the subset of content (Kadansky – Col 15: lines 10-12).

5. **Claims 2, 3, and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadansky et al. (US 6,507,562), in view of Dillon (US 2003/0206554), in view of Kamisaka et al. (US 5,708,960), and further in view of Gupta (US 6,577,599).

Consider **claim 2**, Kadansky, Dillon, and Kamisaka teaches retransmission of bulk data content (Kadansky - missed data packets – Col 5: lines 61-67) and unicast data flow of messages (Kadansky – Col 6: lines 60-62), but do not explicitly teach retransmitting the bulk content to the failing network device via a unicast.

In an analogous art Gupta teaches, retransmitting the bulk content (missed data packets) to the failing network device via a unicast (Gupta – Step 520 in Fig.5, Col 7: lines 35-41 and Col 12: lines 37-51).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Kadansky, Dillon, and Kamisaka to include retransmitting the bulk content (missed data packets) to the failing network device via a unicast, as taught by Gupta, for the advantage of preventing network congestion by individually retransmitting the missed data packets to the appropriate receivers.

Consider **claim 3**, Kadansky, Dillon, Kamisaka, and Gupta teaches wherein the failure indication indicates a subset of unreceived content and,

transmitting only the indicated subset (Kadansky – Col 4: lines 51-61 and Col 5: lines 61-64; Kamisaka - Col 13: line 47 - Col 14: line 2).

Consider **claim 15**, Kadansky, Dillon, Kamisaka, and Gupta teaches wherein a failure indication is sent again if the retransmission fails (Kadansky – Col 5: lines 61-64 teaches that missing packets are retransmitted until they are all received).

6. **Claims 4, 8, and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadansky et al. (US 6,507,562), in view of Dillon (US 2003/0206554), in view of Kamisaka et al. (US 5,708,960), and further in view of McNeil (US 6,421,706).

Consider **claim 4**, Kadansky, Dillon, and Kamisaka do not explicitly teach wherein the step of transmitting the bulk content additionally comprising using a unicast UDP protocol.

In an analogous art McNeil teaches, wherein the step of transmitting the bulk content additionally comprising using a unicast UDP protocol (Col 7: lines 62-66).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Kadansky, Dillon, and Kamisaka to include unicast UDP protocol data transmission, as taught by McNeil, for the advantage of

providing an alternative means of data transmission in cases where an endpoint device fails to receive low bit rate video and audio data (Col 7: lines 54-66).

Consider **claim 8**, Kadansky, Dillon, Kamisaka, and McNeil teaches wherein the step of selectively receiving content comprises:

listening (monitoring) to the scheduled transmission for the subset of content on the destination port addresses at the data transmission times (Dillon – Paragraph 0031: lines 1-5);

selecting the subset of content during the scheduled transmissions; and receiving the subset of content Paragraph 0031: lines 1-5 teaches selectively receiving content from a multicast network).

Consider **claim 9**, Kadansky, Dillon, Kamisaka, and McNeil teaches a method wherein the destination port addresses are multicast port addresses (Kadansky – Col 37: lines 10-21).

7. **Claims 5, 7, and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadansky et al. (US 6,507,562), in view of Dillon (US 2003/0206554), in view of Kamisaka et al. (US 5,708,960), and further in view of Miura et al. (US 6,483,848).

Consider **claim 5**, Kadansky, Dillon, and Kamisaka teaches wherein the step of notifying the end node devices includes an expected start time and duration information.

In an analogous art Miura teaches, wherein the step of notifying the end node devices includes an expected start time and duration information (schedule date and time, reception duration; Col 22: lines 36-66, Col 23: line 23 - Col 24: line 3).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Kadansky, Dillon, and Kamisaka to include the step of notifying the end node devices includes an expected start time and duration information, as taught by Miura, for the advantage of allowing the receiver to know when to supply power to its receiving portion in order to receive the transmitted data (Miura - Col 22: line 62 - Col 23: line 3) and when to end supply of power in order to conserve energy consumption of the receiver.

Consider **claim 7**, Kadansky, Dillon, and Kamisaka teaches wherein the step of notifying the plurality of end node devices includes delivering content control data comprising destination port addresses (Kadansky – Col 37: lines 10-15).

Kadansky, Dillon, and Kamisaka do not explicitly teach data transmission times for the subset of content.

In an analogous art Miura teaches, data transmission times for the subset of content (schedule date and time, reception duration; Col 22: lines 36-66, Col 23: line 23 - Col 24: line 3).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Kadansky, Dillon, and Kamisaka to include data transmission times for the subset of content, as taught by Miura, for the advantage of allowing the receiver to know when to supply power to its receiving portion in order to receive the transmitted data (Miura - Col 22: line 62 - Col 23: line 3) and when to end supply of power in order to conserve energy consumption of the receiver.

Consider **claim 16**, Kadansky discloses receivers utilize sequence numbers, which identify a particular data transmission, to request retransmission of missing packets (Col 14: lines 16-20), but does not explicitly teach wherein a module ID is included in the failure notification.

In an analogous art Dillon teaches, wherein a module ID (unique package identifiers) is included in the failure notification (Paragraph 0135: lines 5-12).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Kadansky, Dillon, Kamisaka, and Miura to include a module ID in the failure notification, as further taught by Dillon, for the advantage of identifying the data content being requested for retransmission.

8. **Claim 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadansky et al. (US 6,507,562), in view of Dillon (US 2003/0206554), in view of Kamisaka et al. (US 5,708,960), in view of McNeil (US 6,421,706), and further in view of Wada (US 2003/0007481).

Consider **claim 10**, Kadansky discloses that multicasting specifies a destination IP address that is a multicast address for the message (Col 37: lines 10-20). However Kadansky, Dillon, Kamisaka, and McNeil do not explicitly teach wherein the destination port addresses are broadcast port addresses.

In an analogous art Wada teaches, wherein the destination port addresses are broadcast port addresses (Paragraph 0164: lines 1-14).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Kadansky, Dillon, Kamisaka, and McNeil to include wherein the destination port addresses are broadcast port addresses, as taught by Wada, for the advantage of transmitting data to all the devices attached to a network (Paragraph 0164: lines 12-14).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason K. Lin whose telephone number is (571)270-1446. The examiner can normally be reached on Mon-Fri, 9:00AM-6:00PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian T. Pendleton can be reached on (571)272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

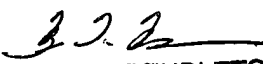
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Jason Lin

12/17/2007


BRIAN PENDLETON
SUPERVISORY PATENT EXAMINER